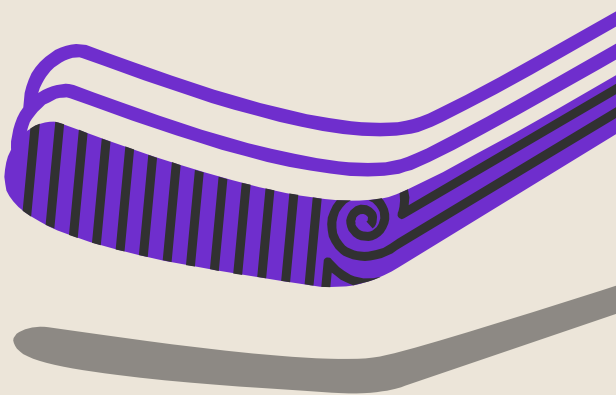




HEALTH DISPARITIES IN ICE HOCKEY

By: Imani Appolon, Bria Simon and Eric Guo

DEBRIEF ON RESEARCH

- ❖ Many athletes in high contact sports have the chance of developing Chronic Traumatic Encephalopathy (CTE).
- ❖ There are now protocols in place to catch it early and prevent it from happening at all.

- ❖ The NHL has refused to associate the development of CTE with repeated head injuries.
- ❖ Leading to their player's to repeatedly die without knowing they had CTE.

- ❖ Men's Mental Health is often overlooked due to the stereotype that men should always be strong.
- ❖ This causes them to hide their struggles which lead to them not being treated.

WHAT IS A HEALTH DISPARITY?

A health disparity is a preventable difference in the burden of disease, injury, violence or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.

WHAT IS CHRONIC TRAUMATIC ENCEPHALOPATHY (CTE)?

- ❖ CTE is a rare form of brain damage that results from repeated head injuries.
- ❖ It is most commonly found in professional athletes in high contact sports.

- ❖ Memory Loss
- ❖ Impaired Judgement
- ❖ Anxiety
- ❖ Depression
- ❖ Impulsive/Erratic Behavior
- ❖ Suicidal Thoughts

CHRIS SIMON



- ❖ He played left wing in the NHL for 15 years.
- ❖ He played on various teams like the Calgary Flames, New York Islanders and the Washington Capitals.
- ❖ Died at 52 by suicide on March 18, 2024

GREG JOHNSON



- ❖ He played center position in the and defensive lineman in the NHL for 14 seasons.
- ❖ He played on various teams like Detroit Red Wings, Pittsburgh Penguins and Chicago Blackhawks.
- ❖ Died at 48 by suicide on July 17, 2019

HOCKEY PLAYERS THAT SUFFERED FROM CTE

Bob Probert~2010; 45 yrs old

Derek Boogard~2011; 28 yrs old

Wade Belak~2011; 35 yrs old

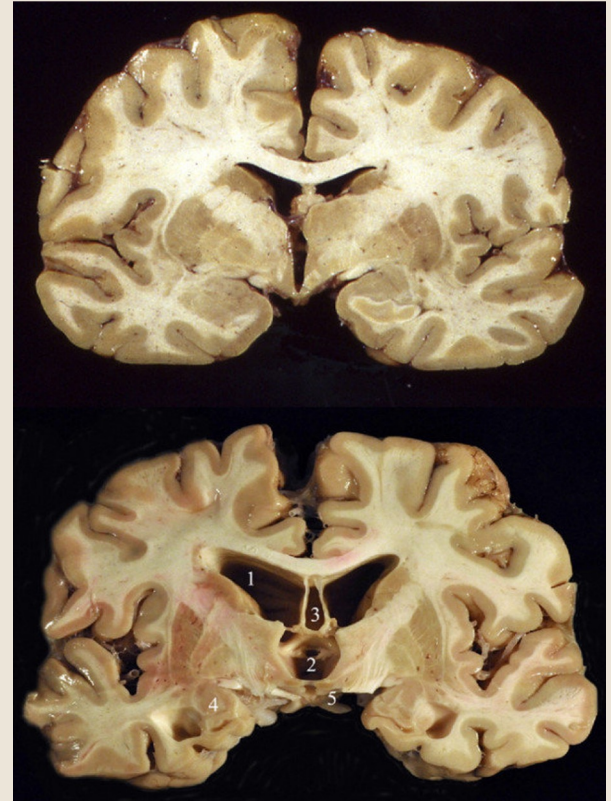
Rick Rypien~2011; 27 yrs old

Todd Ewen~2015; 49 yrs old

Steve Montador~2015; 35 yrs old

Marek Svatos~2016; 34 yrs old

Zarley Zalpski;~2017; 49 yrs old

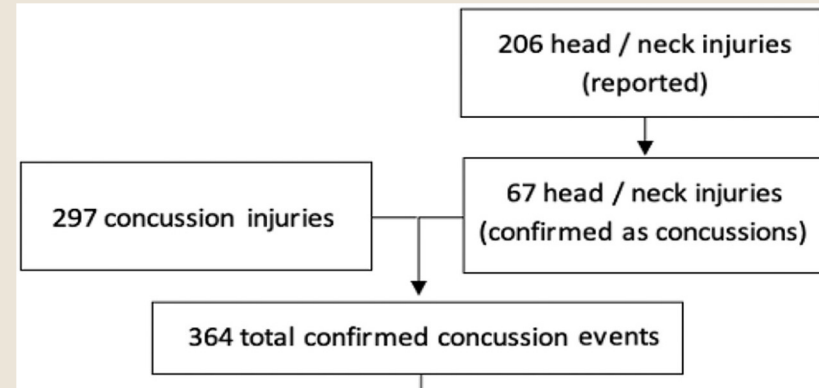


Source: Westhead, Rick "Former NHL Player Greg Johnson..."

ICE HOCKEY PLAYERS THAT DEVELOP CTE

- ❖ Playing a high contact sport like hockey comes with a 14%-30% chance of being concussed.
- ❖ Getting repeated concussions leads to a 23% chance of developing CTE later on in life.

Number of injuries that lead to concussions



NHL'S NEGLIGENCE TO RELATE CTE TO HEAD INJURIES

NHL's Position on Chronic Traumatic Encephalopathy (CTE)

- NHL doesn't believe that there is a link between CTE and repeated head blows.
- Deputy Commissioner Bill Daly cites "science lack" in degenerative brain diseases.
- Veteran NHL enforcer Chris Simon committed suicide due to CTE symptoms, depression, anxiety, and post-traumatic stress disorder.
- US National Institutes of Health in 2022 ruled CTE caused by recurrent traumatic brain injuries.
- Columbia University study shows players with 50+ bouts die a decade earlier.

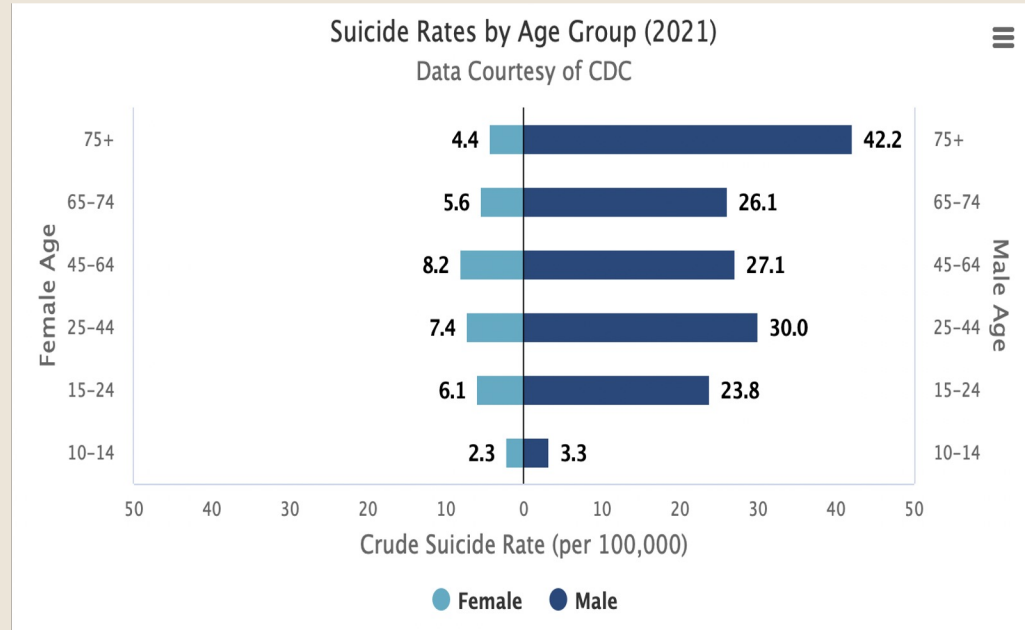


Source: New York Post; Columbia University "The Penalty for Hockey Enforcers May Be Premature Death"; NIH "Concludes CTE is caused by repetitive traumatic brain injuries"

MEN'S MENTAL HEALTH

"Men vs Women Suicide Rates"

- Men have higher suicide rates than women, highest at age 75+ (42.2%) per 100,000.
- Women's suicide rate at the same age is only 4.4%.
- Men may not feel the need for mental health help.





TAKEAWAYS FROM BK-SWAG CHAMPS

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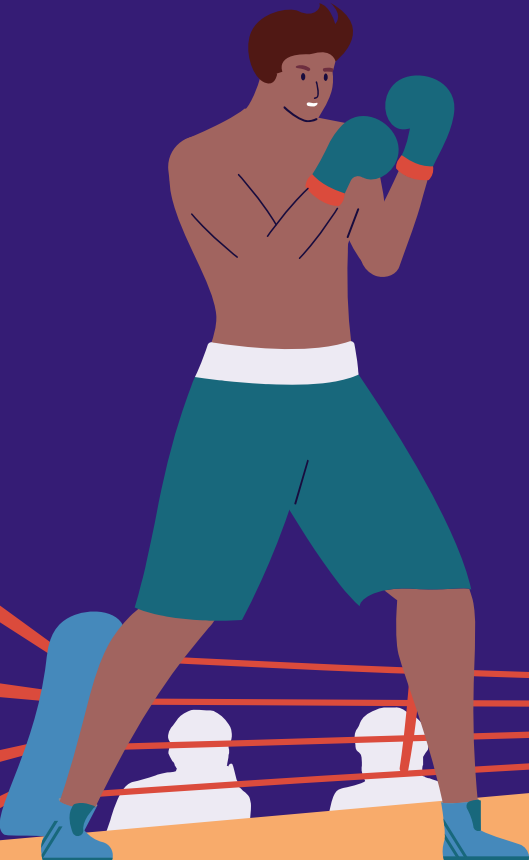
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Health Disparities in **Boxing**

Rexana Chen, Clarisa Quinonez, Ellis Simpson,
Christopher Antoine

An illustration of a male boxer with brown skin, wearing teal boxing gloves and teal shorts with a white waistband. He is in a boxing stance, facing slightly to the right. He is in a boxing ring with orange ropes and blue corner pads. In the background, there are white silhouettes of spectators. The background is a solid dark purple color with some white horizontal lines in the top left and top right corners.

Health Disparities

- Differences in health outcomes and access to healthcare across different populations.
- Influenced by social, economic, and environmental factors.

Social Drivers of Disparities in Boxing

1



**Socioeconomic
Status**

2



**Geographic
Location**

3



**Racial and
Ethnic
Discrimination**

4

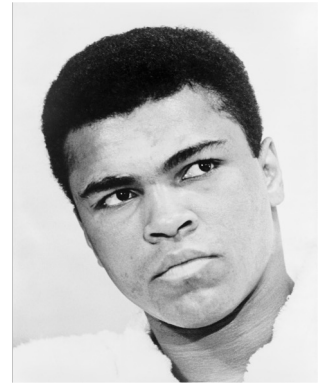
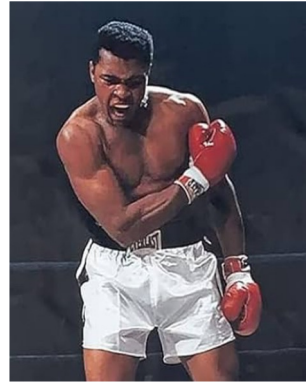


Education

Muhammad Ali

Parkinson's Disease

- Developed Parkinson's Disease shortly after retirement (1981)
 - Tremors and slurred speech
 - media presence was limited due to PD
 - Battled it for 32 years



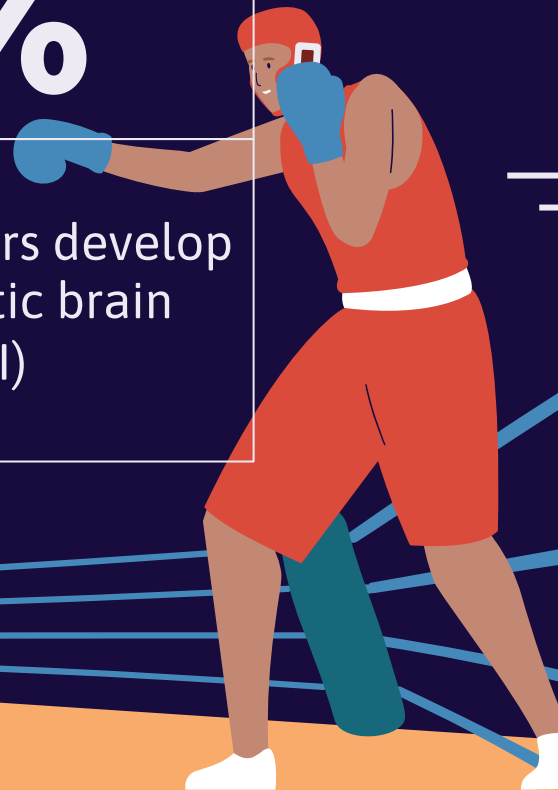
Additional Disparities

40%

of professional boxers were
diagnosed with chronic brain
injury (CBI)

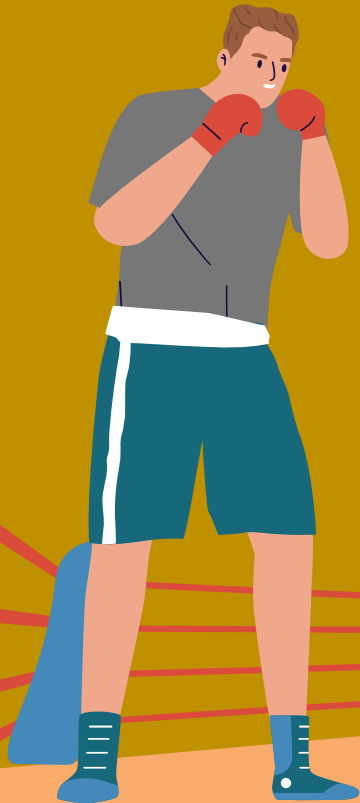
20%

of professional boxers develop
a chronic traumatic brain
injury (CTBI)



The role of healthcare providers

- Listen to fighters who have symptoms like fatigue, problems with sleeping/speaking. Fighters could have a less likely chance of getting a chronic/fatal disease.
- Give proper care to fighters who already have a health condition to maintain a healthy lifestyle.
- Educate boxers on their health condition
- Give equal care to all





A LITTLE ABOUT BK-SWAG CHAMPS



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THANK YOU FOR
LISTENING! 🙄



Health Disparities in Soccer

By: Sanai James, Olivia Steele and
Farhan Ruhan

Health Disparities

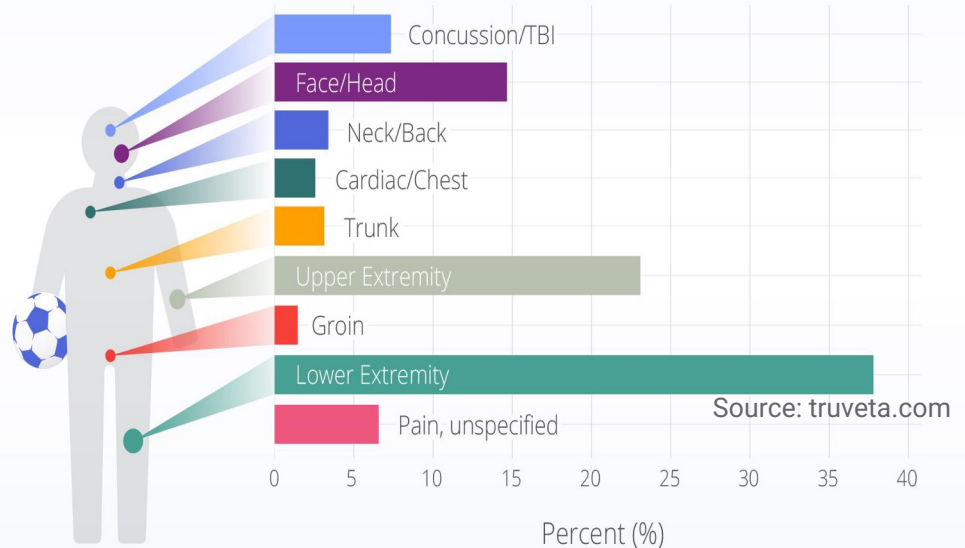


- Health Disparities are preventable differences in access to health care, their outcomes and their determinants between different populations.
- These disparities are often driven by social, economic, and environmental factors.

Some disparities in Soccer are...

- Lack of opportunities for women in soccer
- Lack of Mental health support
- Athletes access to good training facilities and programs.
- Lack of funding
- Players uneducated on safety while playing (38% of soccer players injure their lower extremities)

Soccer injuries by body location



Social Drivers

1

Healthcare Accessibility

- Insurance coverage
- Language barriers

2

Nutrition & Performance

- Nutritious foods
- Healthy affordable food



3

Injury Treatment and Prevention

- Varying access to injury prevention programs
- Treatment for sports related injuries

4

Mental health support

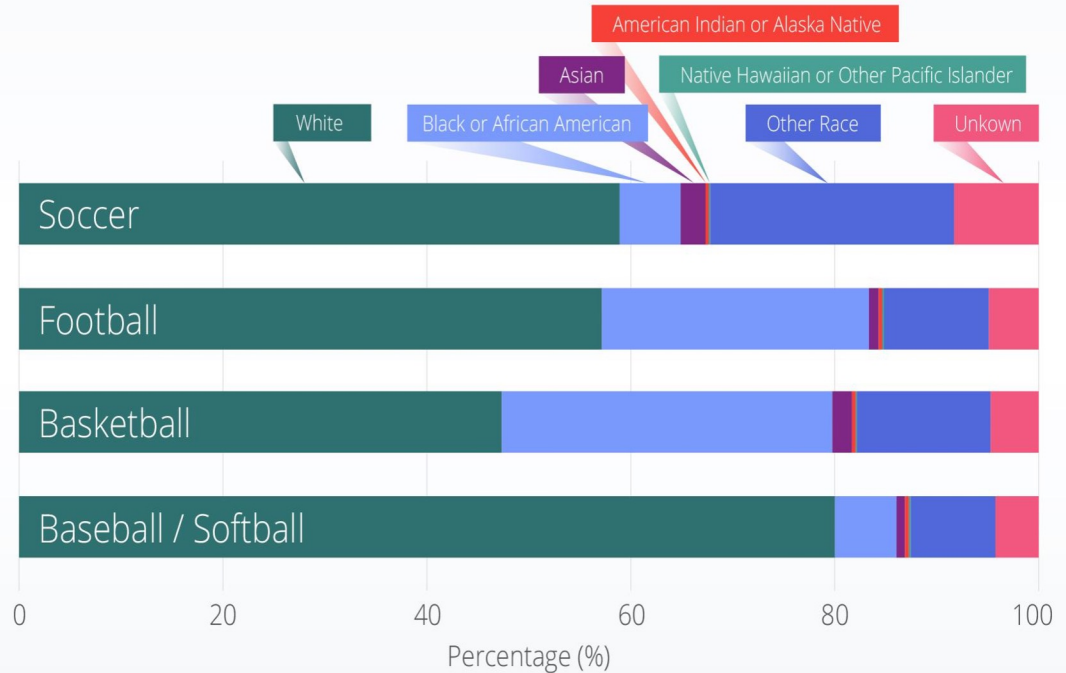
- Challenges in accessing mental health services and support

Communities at risk

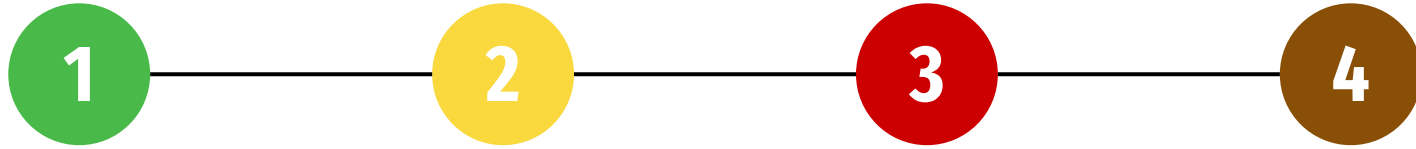
People **living in poverty** often don't have access to good healthcare.

Families that **cannot afford good training** have a higher likelihood of neglected injuries.

Sports injury by race group



Impact on life/Mortality Rate



Players Mental and Physical Health:

- Soccer **increases players moods and confidence** but sometimes the pressure and stress may get to them because they feel the need to overachieve which can take a toll on their mental health.
- As for physical health when **players keep pushing themselves** that's when they tend to get hurt the most since they're not concerned about their safety and wellbeing.

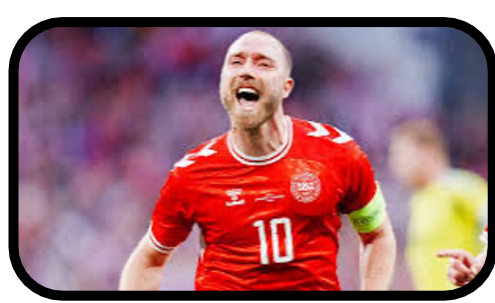
What can health providers do to address these disparities

Health care providers can...

- **Participate** in research to better help their patients
- **Advocating** for their patients
- **Make certain** everyone has access to any care they can provide



Athletes who have faced these disparities



This is **Christian Eriksen**, He is a 32 year old danish professional football/soccer player, he plays for Denmark national team and Manchester United F.C.

- In euro 2020 football match against Finland, Christian went into cardiac arrest in the first half of the game. Fortunately, this player survived with the help of tech and CPR but this isn't the case for everyone.

- There have been multiple cases where players have died on the field because there was no defibrillator on hand. On the right is a picture of Cheick Tiote who died on the field for not receiving the health care needed which is an example of a health disparity.



How BK - SWAG CHAMPS has impacted us



BK-SWAG CHAMPS has given me lots of opportunities to meet doctors and other career professionals and helped me narrow down what I want to be when im older.



BK-SWAG CHAMPS has given me the chance and opportunity to be able to experience health at a closer perspective. It also gives me a lot of exposure which helps me figure out my career path early on.



My experience in BK-SWAG CHAMPS has been eye opening and I am very grateful that I had the opportunity to hear different doctors speak on their experiences and this program helped me discover what I want to study in the future.

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THANK YOU
Any questions?





**THANK YOU
ANY
QUESTIONS?**